INDEPENDENT REVIEWERS OF TEXAS, INC.

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Notice of Independent Review Decision

Date notice sent to all parties:

September 7, 2012

DESCRIPTION OF THE SERVICE OR SERVICES IN DISPUTE:

Repeat MRI of right knee

A DESCRIPTION OF THE QUALIFICATIONS FOR EACH PHYSICIAN OR OTHER HEALTH CARE PROVIDER WHO REVIEWED THE DECISION:

Board Certified Family Practice

REVIEW OUTCOME:

Upon independent review, the reviewer finds that the previous adverse determination/adverse determinations should be:

Provide a description of the review outcome that clearly states whether medical necessity exists for <u>each</u> of the health care services in dispute.

INFORMATION PROVIDED TO THE IRO FOR REVIEW:

Clinical notes 06/04/12-07/26/12 Independent medical evaluation 07/28/11 Appeal letter 08/07/12 Prior reviews 07/25/12 and 08/15/12 Cover sheet and working documents

PATIENT CLINICAL HISTORY [SUMMARY]:

The patient is a female who sustained two separate injuries in xxxx and xxxx. Patient has been followed for complaints of chronic knee pain in the left knee. The patient was seen on 06/29/12 for complaints of right knee pain and physical examination revealed tenderness to palpation within the right knee and loss of full range of motion. It appears the patient did utilize knee braces and physical examination on 07/26/12 again revealed loss of range of motion of the right knee.

The request for right knee MRI repeat MRI of the right knee was denied by utilization review on 07/25/12 as there were no initial radiograph studies of the right knee to support the request. The request was again denied by utilization review on 08/15/12 as there was no indication that MRI studies would change treatment plans as radiographs had already established the diagnosis of osteoarthritis.

ANALYSIS AND EXPLANATION OF THE DECISION INCLUDE CLINICAL BASIS, FINDINGS, AND CONCLUSIONS USED TO SUPPORT THE DECISION:

The request for repeat MRI of the right knee is not recommended as medically necessary. Based on the clinical documentation provided for review the only significant physical examination for the right knee is loss of range of motion. No other positive orthopedic signs were noted suggesting further internal derangement of the right knee that would reasonably require MRI studies. The patient has had a diagnosis of osteoarthritis established by radiograph studies and it is unclear how further MRI studies would significantly change the patient's course of treatment. Additionally initial radiograph and prior MRI studies were not provided for review that would support this request. As such medical necessity is not established for the request.

A DESCRIPTION AND THE SOURCE OF THE SCREENING CRITERIA OR OTHER CLINICAL BASIS USED TO MAKE THE DECISION:

- MEDICAL JUDGEMENT, CLINICAL EXPERIENCE, AND EXPERTISE IN ACCORDANCE WITH ACCEPTED MEDICAL STANDARDS
- X ODG- OFFICIAL DISABILITY GUIDELINES & TREATMENT GUIDELINES

Official Disability Guidelines, Online Version, Knee & Leg Chapter

MRI's (magnetic resonance imaging)

Recommended as indicated below. Soft-tissue injuries (meniscal, chondral surface injuries, and ligamentous disruption) are best evaluated by MRI. (ACR, 2001) See also ACR Appropriateness CriteriaTM. Diagnostic performance of MR imaging of the menisci and cruciate ligaments of the knee is different according to lesion type and is influenced by various study design characteristics. Higher magnetic field strength modestly improves diagnostic performance, but a significant effect was demonstrated only for anterior cruciate ligament tears. (Pavlov, 2000) (Oei, 2003) A systematic review of prospective cohort studies comparing MRI and clinical examination to arthroscopy to diagnose meniscus tears concluded that MRI is useful, but should be reserved for situations in which further information is required for a diagnosis, and indications for arthroscopy should be therapeutic, not diagnostic in nature. (Ryzewicz, 2007) This study concluded that, in patients with nonacute knee symptoms who are highly suspected clinically of having intraarticular knee abnormality, magnetic resonance imaging should be performed to exclude the need for arthroscopy. (Vincken, 2007) In most cases, diagnosing osteoarthritis with an MRI is both

unnecessary and costly. Although weight-bearing X-rays are sufficient to diagnose osteoarthritis of the knee, referring physicians and some orthopaedic surgeons sometimes use magnetic resonance imaging (MRI) either with or instead of weight bearing X-rays for diagnosis. For total knee arthroplasty (TKA) patients, about 95% to 98% of the time they don't need an MRI. Osteoarthritis patients often expect to be diagnosed with MRIs, and this demand influences MRI use. Average worker's compensation reimbursement is also higher for the knee MRI (\$664) than for the knee X-rays (\$136). (Goldstein, 2008) Repeat MRIs are recommended if need to assess knee cartilage repair tissue. In determining whether the repair tissue was of good or poor quality, MRI had a sensitivity of 80% and specificity of 82% using arthroscopy as the standard. (Ramappa, 2007) MRI scans are accurate to diagnose meniscus tears, but MRI is a poor predictor of whether or not the tear can be repaired. Surgeons cannot tell whether the tear will be reparable until the surgery is underway, and it affects recovery because repaired meniscus tears have a more involved recovery compared with surgical removal of the tissue. (Bernthal, 2010) In this case series, in more than half of patients who had an MRI at the request of their referring physician, the MRI was not necessary. MRI was considered unnecessary if: X-rays alone could establish the diagnosis, patellofemoral pain with a normal ligamentous and meniscal exam, the knee pain resolved before seeing an orthopedic surgeon, or the MRI findings had no effect on treatment outcome. MRI studies were deemed necessary if they were indicated by history and/or physical examination to assess for meniscal, ligamentous, or osteochondral injury or osteonecrosis, or if the patient had an unexpected finding that affected treatment. (Khanuja, 2011) Routine use of MRI for follow-up of asymptomatic patients following knee arthroplasty is not recommended, but may be appropriate for pain after TKA with a negative radiograph for loosening and low probability of infection. (Weissman, 2011)

<u>Indications for imaging</u> -- MRI (magnetic resonance imaging):

- Acute trauma to the knee, including significant trauma (e.g, motor vehicle accident), or if suspect posterior knee dislocation or ligament or cartilage disruption.
- Nontraumatic knee pain, child or adolescent: nonpatellofemoral symptoms. Initial anteroposterior and lateral radiographs nondiagnostic (demonstrate normal findings or a joint effusion) next study if clinically indicated. If additional study is needed.
- Nontraumatic knee pain, child or adult. Patellofemoral (anterior) symptoms. Initial anteroposterior, lateral, and axial radiographs nondiagnostic (demonstrate normal findings or a joint effusion). If additional imaging is necessary, and if internal derangement is suspected.
- Nontraumatic knee pain, adult. Nontrauma, nontumor, nonlocalized pain. Initial anteroposterior and lateral radiographs nondiagnostic (demonstrate normal findings or a joint effusion). If additional studies are indicated, and if internal derangement is suspected.
- Nontraumatic knee pain, adult nontrauma, nontumor, nonlocalized pain. Initial anteroposterior and lateral radiographs demonstrate evidence of internal derangement (e.g., Peligrini Stieda disease, joint compartment widening).
- Repeat MRIs: Post-surgical if need to assess knee cartilage repair tissue. (Ramappa, 2007) Routine use of MRI for follow-up of asymptomatic patients following knee arthroplasty is not recommended. (Weissman, 2011)